



GEORGETOWN UNIVERSITY LAW CENTER
INSTITUTE FOR PUBLIC REPRESENTATION

Hope M. Babcock
Angela J. Campbell
David C. Vladeck
Directors
Marvin Ammori
Erik B. Bluemel
Jillian M. Cutler
Emma E. Garrison
Emily Read
Coriell Wright
Staff Attorneys

600 New Jersey Avenue, NW, Suite 312
Washington, DC 20001-2075
Telephone: 202-662-9535
TDD: 202-662-9538
Fax: 202-662-9634

May 21, 2007

VIA EMAIL

Ms. Monica Harvey
629 East Main Street
P.O. Box 1105
Richmond, VA 23218
maharvey@deq.virginia.gov

Re: State Operating Permits for the Control of SO₂ from the Mirant Potomac River Generating Station

Dear Ms. Harvey:

The Institute for Public Representation, on behalf of the Potomac RIVERKEEPER®, the Patuxent RIVERKEEPER®, and the Anacostia RIVERKEEPER® at Earth Conservation Corps, submits the following comments on the State Air Pollution Control Board's three options for the State Operating Permits for the Control of SO₂ from the Mirant Potomac River Generating Station.

Potomac RIVERKEEPER®, Patuxent RIVERKEEPER®, and Anacostia RIVERKEEPER® ("the Riverkeepers") are nonprofit corporations whose missions are to use action, advocacy, and enforcement to protect the Potomac, Patuxent, and Anacostia rivers, respectively. The Institute for Public Representation ("IPR") is a public interest law firm and clinical education program established at Georgetown University Law Center in 1971. Attorneys at IPR function as counsel for groups and individuals who are unable to obtain effective legal representation on matters including those involving the environment. IPR represents the Riverkeepers in this and other legal matters.

The Riverkeepers oppose the Mirant plant's continued operation because of its many harmful effects on public health and the environment and respectfully request the State Air Pollution Control Board to deny issuance of this permit.

BACKGROUND

The Riverkeepers are concerned that the emissions from Mirant's Potomac River Generating Station ("PRGS" or "plant") adversely affect the water quality of the rivers in the surrounding areas. Additionally, the Riverkeepers are concerned because the plant's operation hampers the ability of the community to enjoy and recreate on or near the Potomac River. Residents of the DC area regularly recreate along the Potomac River near the plant, where there are bicycle and jogging paths, public park lands, and popular gathering places, and local residents also canoe, sail, and fish in the river. The plant's emissions endanger the environment and everyone living or working in the area, especially individuals exercising to improve their health and physical fitness.

The Mirant plant emits sulfur dioxide (SO₂) into the "airsheds" of the Potomac, Anacostia, and Patuxent Rivers, and the emissions will settle on land, where they are subsequently washed into the rivers, or directly onto the rivers themselves. Sulfur dioxide emissions are a major precursor to acid rainfall. Gaseous sulfur dioxide readily reacts with water and oxygen in the atmosphere to form liquid sulfuric acid, which falls to the ground as precipitation or remains suspended in fog and humidity in the air. Sulfur dioxide that has not yet reacted with water or oxygen settles out of the air onto land, vegetation, and water bodies, where it will eventually react with water and oxygen to create a mild acid solution. This acid solution can impair the ability of fish and aquatic life to grow, reproduce, and survive, and can also impair the ability of some types of trees to grow and resist disease. *See generally* U.S. EPA, ACID RAIN, available at <http://www.epa.gov/acidrain/>.

Furthermore, when acid rain falls on soil surrounding rivers, it leaches aluminum from the soil, which is toxic at high concentrations. Increased levels of water acidity and aluminum are toxic to fish, cause chronic stress on fish, decreased body weight, smaller size, and other competitive disadvantages. Young fish are generally especially sensitive to acid exposure, and around pH 5.0 fish eggs will simply not hatch. *See* U.S. EPA, EFFECTS OF ACID RAIN: LAKES AND STREAMS, available at http://www.epa.gov/acidrain/effects/surface_water.html.

Sulfur dioxide is also a precursor to particulate matter (PM). Individuals exposed to both gaseous SO₂ and the secondary PM it causes can suffer a variety of adverse health effects, including "temporary breathing difficulty for people with asthma who are active outdoors," irritation of the airways, decreased lung function, respiratory illness, heart disease, and premature death. U.S. EPA, SIX COMMON POLLUTANTS: HEALTH AND ENVIRONMENTAL IMPACTS OF SO₂, available at <http://www.epa.gov/air/urbanair/so2/hlth1.html>; U.S. EPA, PARTICULATE MATTER: HEALTH AND ENVIRONMENT, available at <http://www.epa.gov/oar/particlepollution/health.html>. Children, the sick, and the elderly are most at risk for health complications when exposed to PM pollution from the Mirant plant.

In addition to endangering public health, PM adversely affects water quality. Particulate matter that settles on surface water can make rivers acidic, change the nutrient balance in coastal waters and large river basins, such as the Potomac, Patuxent, and Anacostia rivers. Particulate matter can also deplete nutrients in the soil, damage sensitive riparian areas, and adversely affect the biodiversity of river ecosystems. *See* U.S. EPA, PARTICULATE MATTER: HEALTH AND ENVIRONMENT, available at <http://www.epa.gov/oar/particlepollution/health.html>.

COMMENTS

The PRGS is a sixty year-old, obsolete coal-fired plant that has a poor record of complying with its Clean Air Act obligations. The Mirant plant will continue to adversely affect the Potomac, the Patuxent, and the Anacostia rivers and the community members that live and recreate near them even if Mirant is able to comply with the obligations in the three permit options. Furthermore, once two additional 230kV electric transmission lines to the Central Washington, DC area are installed, which is expected to occur in June 2007, there is no electricity reliability benefit to continued operation of the Mirant Plant. Given the plant's potential to harm the environmental and local residents, the Riverkeepers urge the State Air Pollution Control Board not to issue this permit.

If, however, the Board determines to go forward and authorize Mirant's continued operation of the PRGS, we offer the following additional comments and suggestions.

Trona

The Riverkeepers ask that the Board require that all trona be stored in an environmentally responsible manner, so that trona and trona dust is not released into the environment. Trona has considerable solubility and mobility in water, interacts with acid, and can be toxic to river species at certain levels, which is why trona stockpiles must be maintained so as not to be eroded by wind and rain. We ask that the Board to include provisions in the permit that would ensure that Mirant's required use of trona would not damage water quality.

Alarm System

The Riverkeepers are pleased that Draft Board Options 2 and 3 include provisions that require a certain level of SO₂ emissions to trigger an audible alarm in the facility's control room and require Mirant to document each such incident. The Riverkeepers hope that this will keep facility operators aware of the plant's SO₂ emissions when they approach a level that would violate the NAAQS, deter actual NAAQS violations from occurring, and also create a record of times that SO₂ emissions come close to violating the NAAQS.

However, the Riverkeepers also ask that the permit require Mirant to alert the community about SO₂ emissions—not just the facility's control room. Mirant should keep the public informed about the plant's SO₂ emissions via websites, local newspapers, public access television channels, and e-mail alerts, particularly when levels approach or violate the NAAQS. Published and broadcasted notices of potential NAAQS exceedances at the plant would be cost-effective means to keep local residents and would-be recreators informed about the plant's operations so that they may protect themselves and their families from pollution dangers. For example, the permit could require Mirant to establish an e-mail system to alert members of the community who sign-up to receive messages. Printing and broadcasting notices in a number of

different information sources would help ensure that all segments of the public are informed of potential dangers from the plant, and give them the opportunity to plan their outdoor activities accordingly.

Additionally, Riverkeeper requests that Mirant be required to sound an alarm that is audible to members in the community whenever SO₂ emissions reach a level that violates the NAAQS. Such a warning system would allow local residents and those recreating in the area to avoid outdoor activity when emissions levels may be particularly dangerous to public health. It is particularly important that Mirant warn the community of all NAAQS exceedances so parents with small children, the sick, the elderly, and their caregivers can take any necessary precautions.

Stack Merge Project / Dispersion

The Riverkeepers join the City of Alexandria's comments about the stack merge project. Letter from John Britton to Michael Dowd Re: Comments on Proposed Draft Orders (May 4, 2007). The merging of smokestacks is a prohibited dispersion technique under state and federal law. 9 VAC 5-40-20; 9 VA ADC 5-10-20; 42 U.S.C. § 7423. Mirant should not earn any dispersion credit when setting emissions standards that take into account the stack merge project.

Thank you for the opportunity to provide comments. We urge the Board to consider how harmful the Mirant plant's continued operation is to public health and the surrounding aquatic environment. If you have any questions about the comments contained in this letter, please contact Emma Garrison at 202-662-4025 or eeg22@law.georgetown.edu.

Sincerely,

Hope M. Babcock, Director/Senior Attorney
Emma E. Garrison, Staff Attorney
Institute for Public Representation
Georgetown University Law Center
600 New Jersey Avenue, NW
Washington, D.C. 20001
202-662-9535

Counsel for

Potomac RIVERKEEPER®
1717 Massachusetts Avenue
Washington, D.C. 20036

Patuxent RIVERKEEPER®
Historic Queen Anne
18600 Queen Anne Road
Upper Marlboro, MD 20774

and

Anacostia RIVERKEEPER®
at Earth Conservation Corps
2000 Half Street, SW
Washington, D.C. 20024